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(54) SELF-EXFOLIATED TRIAZOLE-TRIFORMYL PHLOROGLUCINOL BASED COVALENT

ORGANIC NANOSHEETS FOR HIGH AND REVERSIBLE LITHIUM ION STORAGE

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#### (57)ABSTRACT

The invention discloses covalent organic nanosheets (CONs) made of triazole based diamine and triformyl phloroglucinol. The 2D structure of these nanosheets enables their facile amalgamation as an anodic material in a coin cell battery, which exhibits exceptionally high specific capacity of ~720 mAh/g at a current density of 100 mA/g.

